MARINE POLLUTION BULLETIN

List of Contents and Author Index Volume 39, 1999

MARINE POLLUTION BULLETIN

The International Journal for Marine Environmental Scientists, Engineers, Administrators, Politicians and Lawyers.

The MARINE POLLUTION BULLETIN sets out to cover all aspects of the environmental conditions of estuaries, seas and oceans. The journal welcomes news, comment, reviews, and research reports, not only on the threat of noxious substances to marine life but also on the productivity, processes and functions of the marine environment, and the effects of mankind (including management) on these. It publishes accounts of economic and legal as well as scientific aspects of marine pollution.

Author Service Department

For queries relating to the general submission of articles (including electronic text and artwork) and the status of accepted manuscripts, please contact the Author Service Department: E-mail: authors@elsevier.co.uk; Fax: +44 (0) 1865 843905; Tel: +44 (0) 1865 843900.

Publication information: Marine Pollution Bulletin (ISSN 0025-326X). For 1999, volumes 38 and 39 are scheduled for publication. Subscription prices are available upon request from the Publisher or from the Regional Sales Office nearest you or from this journal's website (http://www.elsevier.nl/locate/marpolbul). Further information is available on this journal and other Elsevier Science products through Elsevier's website: (http://www.elsevier.nl). Subscriptions are accepted on a prepaid basis only and are entered on a calendar year basis. Issues are sent by standard mail (surface within Europe, air delivery outside Europe). Priority rates are available upon request. Claims for missing issues should be made within six months of the date of dispatch.

Periodicals postage is paid at Rahway, NJ. Marine Pollution Bulletin (ISSN 0025-326X) is published in two volumes, one with monthly issues, and the second with up to 12 special issues by Elsevier Science Ltd., The Boulevard, Langford Lane, Kidlington, Oxford OX5 1GB, UK. The US subscription price is \$821.00 per year.

POSTMASTER: Send address corrections to: Marine Pollution Bulletin, Elsevier Science, Customer Support Department, PO Box 945, New York, NY 10159-0945.

Distributed in the USA by Mercury Airfreight International, 365 Blair Road, Avenel, NJ 07001.

CONTENTS OF VOLUME 39

Numbers 1–12		
Editorial	1	Introduction to the Special Issue R. S. S. Wu
Keynote Papers	3	Using Science for Better Protection of the Marine Environment J. S. Gray
	11	Eutrophication, Water Borne Pathogens and Xenobiotic Compounds: Environmental Risks and Challenges R. S. S. Wu
	23	Quality Assurance in Environmental Monitoring G. E. Batley
	32	Ecological Significance of Endocrine Disruption in Marine Invertebrates M. H. Depledge and Z. Billinghurst
	39	Biomonitoring the Health of Coastal Marine Ecosystems – The Roles and Challenges of Microscale Toxicity Tests P. G. Wells
	48	Necessity of Defining Biomarkers for Use in Ecological Risk Assessments D. Schlenk
	54	Importance of Internal Biotic Concentrations in Risk Evaluations with Aquatic Systems D. W. Connell, Y. Chaisuksant and J. Yu
	62	Butyltin Contamination in Marine Mammals – A Review S. Tanabe
	73	Application of Numerical Models in Marine Pollution Research in China Su. Jilan and D. Lixian
	80	Marine Pollution Prevention and Management in the East Asian Seas: A Paradigm Shift in Concept, Approach and Methodology C. Thia-Eng
Ecotoxicology	89	The Use of Aquatic Macrophyte Ecotoxicological Assays in Monitoring Coastal Effluent Discharges in Southern Australia T. R. Burridge, M. Karistianos and J. Bidwell
	97	Aspects of Assaying Sediment Toxicity in Irish Estuarine Ecosystems P. A. Byrne and J. O'Halloran
	106	Effect of Copper on Activity and Feeding in the Subtidal Prosobranch Babylonic lutosa (Lamarck) (Gastropoda: Buccinidae) S. G. Cheung and L. S. Wong
	112	Biomarkers for TBT Immunotoxicity Studies on the Cultivated Clam <i>Tapes philippinarum</i> (Adams and Reeve, 1850) F. Cima, M. G. Marin, V. Matozzo, L. Da. Ros and L. Ballarin

in Perna perna (Mollusca: Bivalvia)

116

The Effects of Mercury Exposure on the Surface Morphology of Gill Filaments

M. A. Gregory, R. C. George, D. J. Marshall, A. Anandraj and T. P. McChurg

122 A Case Study on Identifying the Toxicant in Effluent Discharged from a Chemical Plant H. Jin, X. Yang, D. Yin and H. Yu Effects of Animal Size on Concentrations of Metallothionein and Metals in 126 Periwinkles Littorina littorea Collected from the Firth of Clyde, Scotland K. M. Y. Leung and R. W. Furness 137 Biochemical and Physiological Responses in Atlantic Salmon (Salmo salar) Following Dietary Exposure to Copper and Cadmium A.-K. Lundebye, M. H. G. Berntssen, S. E. W. Bonga and A. Maage 145 Multi-variate Analysis of Biomarker Responses in Mytilus edulis and Carcinus maenas from the Tees Estuary (UK) K. N. Astley, H. C. Meigh, G. A. Glegg, J. Braven and M. H. Depledge 155 Expression of Mammalian Metallothionein-I Gene in Cyanobacteria to Enhance Heavy Metal Resistance Z. Chen, L. Ren, Q. Shao, D. Shi and B. Ru Biokinetics of Radiocobalt in the Asteroid Asterias rubens (Echinodermata): Sea 159 Water and Food Exposures M. Warnau, S. W. Fowler and J.-L. Teyssié A Comparison of Growth Biomarkers for Assessing Sublethal Effects of Cad-165 mium on a Marine Gastropod, Nassarius festivus K. T. Wo, P. K. S. Lam and R. S. S. Wu 174 Assessment of the Comparative Toxicity of Sewage Effluent from 10 Sewage Treatment Plants in the Area of Sydney, Australia using an Amphipod and Two Sea Urchin Bioassays J. G. Woodworth, C. King, A. G. Miskiewicz, E. Laginestra and J. Simon 179 Effects of Wastewater-borne Heavy Metals on Mangrove Plants and Soil Microbial Activities M. W. Yim and N. F. Y. Tam 187 Eutrophication Dynamics of Tolo Harbour, Hong Kong J. H. W. Lee and F. Arega Nutrient Enrichment 193 Nutrient Behavior and Productivity in a River System Affected by Fishpond Effluents D. G. Galope-Bacaltos, M. L. San Diego-McGlone, G. S. Jacinto and C. L. Villanoy An Estimate on External Fluxes of Phosphorus and its Environmental Sig-200 nificance in Xiamen Western Sea H. Hong, S. Shang and B. Huang 205 Alkaline Phosphatase Activity and Utilization of Dissolved Organic Phosphorus by Algae in Subtropical Coastal Waters B. Huang and H. Hong Bioassessment Techniques for Monitoring of Eutrophication and Nutrient

J. E. Lyngby, S. Mortensen and N. Ahrensberg

F. Shishehchian, F. M. Yusoff, H. Omar and M. S. Kamarudin

Nitrogenous Excretion of *Penaeus monodon* Postlarvae Fed with Different Diets

Limitation in Coastal Ecosystems

224

Eutrophication

and

Pollution Monitoring	229	The GEF/UNDP/IMO Malacca Straits Demonstration Project: Sources of Pollution A. R. Abdullah, N. M. Tahir, T. S. Loong, T. M. Hoque and A. H. Sulaiman
	234	Metal Concentrations in Tissues of Rabbitfish (Siganus oramin) Collected from Tolo Harbour and Victoria Harbour in Hong Kong L. M. So, R. Y. H. Cheung and K. M. Chan
	239	Bioaccumulation of Sediment-Bound Heavy Metals in Grey Mullet, Liza macrolepis MH. Chen and CY. Chen
	245	Antibiotic Resistance and Plasmid Profiles of Vibrio Isolates from Cultured Silver Sea Bream, Sparus sarba J. Li, J. Yie, R. W. T. Foo, J. M. L. Ling, H. Xu and N. Y. S. Woo
	250	Development of a Capillary Zone Electrophoretic Method for the Rapid Separation and Detection of Hepatotoxic Microcystins P. C. H. Li, S. Hu and P. K. S. Lam
	255	Clam Transplantation and Stress-Related Biomarkers as Useful Tools for Assessing Water Quality in Coastal Environments C. Nasci, L. Da Ros, G. Campesan, E. S. Van Vleet, M. Salizzato, L. Sperni and B. Pavoni
	261	Cytological and Physiological Biomarker Responses from Green Mussels, <i>Pernaviridis</i> (L.) Transplanted to Contaminated Sites in Hong Kong Coastal Waters S. Nicholson
	269	Concentration of 7 Heavy Metals in Sediments and Mangrove Root Samples from Mai Po, Hong Kong R. G. Ong Che
	280	Imposex in Morula Granulata as Bioindicator of Tributyltin (TBT) Contamination in the Dampier Archipelago, Western Australia T. J. Reitsema and J. T. Spickett
	285	Multiple Discriminant Analysis of Marine Sediment Data P. K. S. Shin and K. Y. S. Fong
	295	Imposex in <i>Thais gradata</i> and <i>Chicoreus capucinus</i> (Mollusca, Neogastropoda, Muricidae) from the Straits of Johor: A Case Study using Penis Length, Area and Weight as Measures of Imposex Seveing <i>K. S. Tan</i>
	304	Spatial and Temporal Variations of Metals in Richards Bay Harbour (RBH), South Africa L. A. Vermeulen and V. Wepener
	308	Dune Mining and the Nhlabane Estuary, South Africa: the Effect of a Dredger Crossing on the Zoobenthic Community L. Vivier and D. P. Cyrus

in Victoria Harbour and Vicinity, Hong Kong, 1988-1996

Some Observations on the Changes of Physico-Chemical and Biological Factors

Y.-K. Yung, K. Yau, C. K. Wong, K. K. Chan, I. Yeung, C. S. W. Kueh and M. J.

315

Broom

Time Trend of BHCs and DDTs in a Sedimentary Core in Macao Estuary, 326 Southern China G. Zhang, Y. S. Min, B. X. Mai, G. Y. Sheng, J. M. Fu and Z. S. Wang 331 A Recent Shellfish Toxin Investigation in China M. Zhou, J. Li, B. Luckas, R. Yu, T. Yan, C. Hummert and S. Kastrup Aquatic Ecological and Human Health Risk Assessment of Chemicals in Wet Risk Assessment 335 Weather Discharges in the Sydney Region, New South Wales, Australia and Risk Management G. Bickford, J. Toll, J. Hansen, E. Baker and R. Keessen Organochlorines in Hong Kong Fish 346 H. M. Chan, K. M. Chan and M. Dickman 352 Mercury in Human Hair and Fish: is there a Hong Kong Male Subfertility Connection? M. D. Dickman, K. M. C. Leung and L. C. L. Koo 357 Impact of Mussel Culture on Macrobenthic Community Structure in Saldanha Bay, South Africa J. M. E. Stenton-dozey, L. F. Jackson and A. J. Busby Trace organics Organochlorine Pesticide Residues in Soils and Sediments of the Herbert and 367 Burdekin River Regions, North Queensland - Implications for Contamination of the Great Barrier Reef J. E. Cavanagh, K. A. Burns, G. J. Brunskill and R. J. Coventry Distribution and Fate of Organochlorine Pollutants in the Pearl River Estuary 376 H. Hong, W. Chen, L. Xu, X. Wang and L. Zhang 383 Contamination by Persistent Organochlorines in Small Cetaceans from Hong Kong Coastal Waters T. B. Minh, M. Watanabe, H. Nakata, S. Tanabe and T. A. Jefferson 393 Contamination of Tris(4-Chlorophenyl) Methane and Tris(4-Chlorophenyl) Methanol in Marine Mammals from Russia and Japan: Body Distribution, Bioaccumulation and Contamination Status M. Watanabe, S. Tanabe, N. Miyazaki, E. A. Petrov and W. M. Jarman

